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09/858,309	05/15/2001	Peder J. Jungck	10736/6	1477
757	7590	08/05/2005	EXAMINER	
BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			VU, THONG H	
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			2142	

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/858,309

Applicant(s)

JUNGCK ET AL.

Examiner

Thong H. Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-111 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-111 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. Claims 1-111 are pending.
2. This is a continuation-in-part of 09/602,129 filed 6/23/2000.
3. The Co-pending information and corrected paragraph [0088] in specification have been recorded.

***Response to Arguments***

4. Applicant's arguments filed 12/28/04 with respect to claims 1-111 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-25,29-40,50-62,64-85,87-99,102,103,105-111 are rejected under 35 U.S.C. § 102(e) as being anticipated by Dutta et al [Dutta, 6,826,694 B1].

5. As per claim 1, Dutta discloses a method of processing a first data packet transmitted over a network from a source to a first recipient, said first data packet comprising a header layer and an application data layer [Dutta, a firewall intercepts packets from source to destination, a header and a payload, col 1 lines 15-45; the first packet, col 3 line 2], said method comprising:

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(a) capturing said first data packet from said network prior to its reception by said first recipient [Dutta, a firewall intercepts packets prior to its received by an intended destination node, col 1 lines 15-45];

(b) analyzing said header layer of said first data packet according to a first rule [Dutta, a set of rules, the first rule, second rule, third rule based upon the domain name, col 1 lines 45-65, col 2 lines 47-65; analyzed by an access rule, col 3 lines 9-50];

(c) examining (i.e.: filtering), selectively, a dynamically specified portion of said application data layer of said first data packet according to a second rule [Dutta, filtering device, col 3 line 55-col 4 line 6; analyzes the contents of a packet and selects an access rule which dynamically formulated by the proxy, col 4 lines 59-67. Dutta discloses the processor selects an access rule based upon the contents of the payload of received packet, performing the action, col 4 lines 28-40. It clearly that the set of rules provides different actions based upon the different content packets];

(d) determining a first action to be taken on said first data packet according to a third rule [Dutta, determined if the prescribed action of the rule is to refer, col 3 lines 9-29]; and

(e) performing said first action on said first data packet [Dutta, action is performed, col 3 lines 9-29; the rule prescribes an action, col 4 lines 41-58].

6. Claim 2 contains the similar limitations set forth in claim 1. Therefore claim 2 is rejected for the same rationale set forth in claim 1.

7. As per claim 3, Dutta discloses intercepting said first data packet prior to receipt by a network router or firewall [Dutta, firewall, col 1 lines 29-44].

8. As per claim 4, Dutta discloses (f) allowing redefinition of said first, second and third rules by an entity external to said packet interceptor [Dutta, a node external to the firewall, col 2 lines 35-39].

9. As per claim 5, Dutta discloses allowing dynamic redefinition [Dutta, dynamically formulated by the proxy, col 4 lines 59-67].

10. As per claim 6, Dutta discloses (f) redefining, remotely, said first, second and third rules [Dutta, a set of rules, the first rule, second rule, third rule based upon the domain name, col 1 lines 45-65, col 2 lines 47-65].

11. As per claim 7, Dutta discloses said second and third rules are based at least in part on said analysis of said header [Dutta, the rule that corresponds to the received packet, col 2 lines 40-46].

12. As per claim 8, Dutta discloses determining a first result of said first rule, said examining further comprises determining a second result of said second rule, said determining further comprising determining said first action to be taken

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on said first data packet according to said first and second results as inherent feature of the set of rules.

13. As per claim 9, Dutta discloses predefining said first, second and third rules as inherent feature of the set of rules.

14. As per claim 10, Dutta discloses no analysis of said header layer according to said first rule as inherent feature of the set of rules.

15. As per claim 11, Dutta discloses no examination of said application data layer according to said second rule as inherent feature of the set of rules.

16. As per claim 12, Dutta discloses a network address, said analyzing further comprises analyzing said network address according to said first rule [Dutta, source address, col 3 lines 39-50].

17. As per claim 13, Dutta discloses determining whether said network address matches a pre-defined criteria [Dutta, prescribed action, col 4 lines 28-40]

18. As per claim 14, Dutta discloses a network address and said network address comprises a transport control port address [Dutta, destination port, col 2 lines 20-34].

19. As per claim 15, Dutta discloses a network address and said network address comprises an Internet protocol address [Dutta, IP, col 2 lines 20-34].

20. As per claim 16, Dutta discloses a network address and said network address comprises a media access control address [Dutta, source port, col 2 lines 20-34].

21. As per claim 17, Dutta discloses application data generated by said source [Dutta, header and payload, col 1 lines 29-44].

22. As per claim 18, Dutta discloses a uniform resource locator and further wherein said second rule comprises determining whether said uniform resource locator matches a pre-defined criteria [Dutta, URL, col 2 lines 47-65].

23. As per claim 19, Dutta discloses forwarding said first data packet to an entity external to said packet interceptor, said external entity being different from said first recipient [Dutta, the firewall decides whether to PASS or DROP the packets, col 3 lines 9-29].

24. As per claim 20, Dutta discloses the first action comprises releasing said first data packet to said network [Dutta, the firewall decides whether to PASS or DROP the packets, col 3 lines 9-29].

25. As per claim 21, Dutta discloses said first action comprises copying said first data packet to a second data packet; and forwarding said second data packet to an entity external to said packet interceptor, said external entity being different from said first recipient as inherent features of a prescribed actions.

26. As per claim 22, Dutta discloses said first action further comprises receiving a command from said external entity dictating a second action be taken on said first data packet as inherent features of a prescribed actions.

27. As per claim 23, Dutta discloses said second action comprises deleting said first data packet [Dutta, DROP action, col 3 lines 39-50].

28. As per claim 24, Dutta discloses second action comprises releasing said first data packet to said network [Dutta, PASS action, col 4 lines 1-6].

29. As per claim 25, Dutta discloses releasing said first data packet to said network [Dutta, network 210, Fig 2].

30. As per claim 29, Dutta discloses said first action comprises transmitting a response to said source based on said first data packet according to a fourth rule [Dutta, a set of rules, col 3 lines 9-29].



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31. As per claim 30, Dutta discloses said first action further comprises configuring said response to appear to originate from said first recipient [Dutta, configuration, col 5 lines 25-32].

32. As per claim 31, Dutta discloses (f) determining which of said plurality of rule sets to apply to said first data packet [Dutta, a set of rules, col 3 lines 9-29].

33. As per claim 32, Dutta discloses (f) facilitating performing (a), (b), (c), (d) and (e) non-invasively with respect to said network for a plurality of entities external to said packet interceptor as inherent feature of the filtering device.

34. As per claim 33, Dutta discloses said method further comprising performing (a), (b), (c), (d) and (e) by a router [Dutta, a firewall, col 1 lines 29-44]].

35. As per claim 34, Dutta discloses (f) receiving a second data packet from an entity external to said packet interceptor, said second data packet directed to said packet interceptor; and (g) introducing said second data packet into said network as inherent feature of the filter mechanism.

36. As per claim 35, Dutta discloses said network is characterized by a wire speed, said method further comprising performing (a)-(e) at least at said wire speed as inherent feature of Internet [Dutta, Internet, col 4 line 10].

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37. As per claim 36, Dutta discloses said first data packet is characterized seven Open Systems Interconnection (OSI) defined layers, said dynamically specified portion comprising any at least one of said seven layers of the filter mechanism.

38. As per claims 37,38 Dutta discloses said network comprises an optical network or an electrical network as inherent feature of Internet.

39. Claim 39 contains the similar limitations set forth in claim 1. Therefore claim 39 is rejected for the same rationale set forth in claim 1.

40. As per claim 40, Dutta discloses performing (a)-(e) invisibly to at least one of said source and said first recipient (i.e.: destination) [Dutta, a firewall functions as proxy between the source and destination, col 1 lines 29-44. It clearly that the source address is invisible by the destination].

41. Claims 50-62,64-85,87-99,102,103,105-111 contain the similar limitations set forth of claims 1-25,29-40. Therefore, claims 50-62,64-85,87-99,102,103,105-111 are rejected for the similar rationale set forth in claims 1-25,29-40.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26-28, 41-49, 63, 86, 100, 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta et al [Dutta, 6,826,694 B1] in view of Kloth [6,598,034 B1].

42. As per claim 26, Dutta discloses a system and method for access control using a firewall with filtering device to apply a rule to a packet based upon the contents. However Dutta does not explicitly de tail

**modifying** said first data packet; and releasing said modified first data packet to said network.

In the same endeavor, Kloth discloses a apparatus and method that provides a routing engine for processing data packets based upon certain rules including the data packets can be altered or modified as a result of the detect patterns [Kloth, modified packets, col 4 lines 38 et seq.]

Therefore it would have been obvious to an ordinary skill in the art at the time of the invention was made to incorporate the modifying packet as taught by Kloth into the Dutta's apparatus in order to utilize the rules. Doing so would provide additional capabilities to the firewall processing functions.

43. As per claim 27, Dutta-Kloth disclose **modifying** at least a portion of said header layer [Klot, modified packets, col 4 lines 38 et seq.]

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44. As per claim 28, Dutta-Kloth disclose **modifying** at least a portion of said application data layer [Kloth, modified packets, col 4 lines 38 et seq.].

45. As per claim 41, Dutta-Kloth disclose A method of processing a first data packet directed to a first recipient over a network, said first data packet comprising header data and application data, said method comprising:

(a) intercepting said first data packet prior to receipt by said first recipient [Dutta, a firewall intercepts packets prior to its received by an intended destination node, col 1 lines 15-45];

(b) capturing said first data packet in a buffer [Kloth, buffer 712, Fig 7];

(c) analyzing, selectively, said header data according to a first rule [Dutta, firewall, header, col 1 lines 15-45];

(d) analyzing, selectively, a dynamically specified portion of said application data according to a second rule [Dutta, analyzes the contents of a packet and selects an access rule which dynamically formulated by the proxy, col 4 lines 59-67];

(e) copying (i.e.: shared, distribute, parse), selectively, said first data packet and forwarding, selectively, said copied first data packet to a second recipient different from said first recipient according to a third rule [Kloth, distributed system, col 15 lines 20-38. It is clearly that the Internet server distributed or copied a same file to different client nodes];

(f) releasing, selectively, said first data packet back to said network according to a fourth rule [Dutta, PASS action, col 4 lines 1-6];

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(g) modifying, selectively, said first data packet and releasing, selectively, said modified first data packet back to said network according to a fifth rule

[Kloth, modified packets, col 4 lines 38 et seq.];

(h) deleting, selectively, said first data packet from said buffer according to a sixth rule [Dutta, DROP action, col 3 lines 39-50; and

(i) storing, selectively, information about said first data packet according to a seventh rule [Kloth, IP packet stored in the router engine, col 42-60].

46. As per claim 42, Dutta-Kloth disclose (j) receiving a second data packet from said second recipient and introducing said second data packet into said network [Dutta, a combination of the contents and header parameters or the packet, col 4 lines 28-40].

47. As per claim 43 Dutta-Kloth disclose (j) redefining said first, second, third, fourth, fifth, sixth and seventh rules by said second recipient [Dutta, a set of rules, col 3 lines 9-29].

48. As per claims 44-47 Dutta-Kloth disclose a compound operation [Dutta, a combination of the contents and header parameters or the packet, col 4 lines 28-40].

49. As per claim 48 Dutta-Kloth disclose (j) generating a second data packet directed to said source in response to said first data packet according to a eighth

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rule [Dutta, Peer A and Peer B, col 3 lines 55-col 4 line 6].

50. As per claim 49 Dutta-Kloth disclose (e), (f), (g) and (h) in response to a command from said second recipient [Kloth, command, col 9 lines 5-25].

51. Claims 63,86,100,104 contain the similar limitations set forth of claims 26-28. Therefore, claims 63,86,100,104 are rejected for the similar rationale set forth in claims 26-28.

52. As per claim 101, Dutta-Kloth disclose adapting a content of said application data layer [Dutta, an access rule based upon the content of the payload, col 4 lines 28-40].

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thong Vu*, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Andrew Caldwell*, can be reached at (571) 272-3868. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Thong Vu*  
**Patent Examiner**  
**Art Unit 2142**

